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element 354 is shown as the longest element and projects out from the other elements 352. In this manner, the array 350 can better simulate a cornea of an eye to be ablated.

From all that has been said, it will be clear that there has thus been shown and described herein a device for simulating ophthalmic surgery which fulfills the various objects and advantages sought therefor. It will be apparent to those skilled in the art, however, that many changes, modifications, variations, and other uses and applications of the subject device are possible and contemplated. All 10 changes, modifications, variations, and other uses and applications which do not depart from the spirit and scope of the invention are deemed to be covered by the invention, which is limited only by the claims which follow.

What is claimed is:

- 1. A device for simulating an ablation of a cornea of an eye, comprising:
 - at least one sensing device capable of sensing a presence of at least a portion of a laser beam, and
 - a processor adapted to determine whether said at least one sensing device has sensed said presence of said laser beam to create an ablation profile based on, at least in part, a duration of said presence of said laser beam.
- 2. The device for simulating an ablation of a cornea of an eye according to claim 1, wherein said processor further comprises:
 - a display to provide a three dimensional view of said ablation profile.
- 3. The device for simulating an ablation of a cornea of an eye according to claim 1, wherein said at least one sensing device comprises a plurality of sensing elements.
- 4. The device for simulating an ablation of a cornea of an eye according to claim 3, wherein:

said plurality of sensing elements are arranged in a grid. 35 eye, comprising:

- 5. The device for simulating an ablation of a cornea of an eye according to claim 1, wherein said at least one sensing device comprises:
 - at least one photovoltaic sensor.
- **6**. The device for simulating an ablation of a cornea of an $_{40}$ eye according to claim **1**, wherein said at least one sensing device comprises:
 - at least one electronic sensor.
- 7. The device for simulating an ablation of a cornea of an eye according to claim 1, wherein said at least one sensing 45 device comprises:
 - at least one galvanometric device.
- 8. The device for simulating an ablation of a cornea of an eye according to claim 1, wherein said at least one sensing device comprises:
 - a bundle of fiber optic elements.
- 9. The device for simulating an ablation of a cornea of an eye according to claim 8, wherein:
 - an end of said bundle of fiber optic elements is arranged to simulate a contour of a cornea.
- 10. A method of simulating an ablation of a cornea of an eye, comprising:
 - providing an array of sensor devices to sense a presence of a laser beam; and
 - determining whether said array of sensing devices has sensed said presence of said laser beam;
 - creating an ablation profile based on, at least, a duration of said presence of said laser beam.
- 11. A method of simulating an ablation of a cornea of an 65 eye, comprising:

determining a first final ablation profile;

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irradiating a laser beam on an array of sensing elements in accordance with said first final ablation profile; and constructing a simulated ablation profile based on, at least in part, a duration of irradiation and corresponding irradiated portion of said array of sensing elements.

- 12. The method of simulating an ablation of a cornea of an eye according to claim 11, further comprising:
 - comparing said simulated ablation profile with said first final ablation profile.
- 13. The method of simulating an ablation of a cornea of an eye according to claim 12, further comprising:
 - determining a second final ablation profile if, based on said comparison of said simulated ablation profile with said first final ablation profile, said simulated ablation profile does not match said first final ablation profile to within a predetermined criteria.
- 14. The method of simulating an ablation of a cornea of an eye according to claim 13, further comprising:
 - replacing said first final ablation profile with said second final ablation profile.
- 15. The method of simulating an ablation of a cornea of an eye according to claim 11, wherein:
- said simulated ablation profile is three dimensional.
- 16. The method of simulating an ablation of a cornea of an eye according to claim 11, further comprising:

displaying said simulated ablation profile.

- 17. The method of simulating an ablation of a cornea of an eye according to claim 16, wherein:
 - said simulated ablation profile is displayed in a three dimensional view.
- **18**. A method of simulating an ablation of a cornea of an eye, comprising:
 - (a) determining a first final ablation profile;
 - (b) irradiating a laser beam on an array of sensing elements in accordance with said first final ablation profile;
 - (c) constructing a simulated ablation profile based on, at least in part, a duration of irradiation and corresponding irradiated portion of said array of sensing elements;
 - (d) comparing said simulated ablation profile with said first final ablation profile;
 - (e) determining a second final ablation profile to replace said first final ablation profile if, based on said comparison of said simulated ablation profile with said first final ablation profile, said simulated ablation profile does not match said first final ablation profile to within a predetermined criteria; and
 - (f) repeating steps (a) through (e) until said simulated ablation profile matches said first final ablation profile, based on said comparison, to within said predetermined criteria.
- 19. A method of simulating an ablation of a cornea of an eye, comprising:
 - determining a final ablation profile which represents a profile of an intended ablation of said cornea;
 - determining a first energy profile based on said final ablation profile;
 - irradiating a laser beam on an array of sensing elements in accordance with said first energy profile; and
 - constructing a simulated ablation profile based on, at least in part, a duration of irradiation and corresponding irradiated portion of said array of sensing elements.